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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,423	12/03/2001	Tapesh Yadav	A21	4189

25235 7590 12/08/2003
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EXAMINER

*RAEVIS, ROBERT R

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,423

Applicant(s)

YADAV ET AL.

Examiner

Robert R. Raevis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) 3-6, 8-12 and 22-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claims 1, 2, 7 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 7, this claim is directed to a "device", yet the device includes a "powder" (line 3) limitation. Is "powder" really a part of the device? It would appear that the disclosed "powder" was used to construct the device, and that the "powder" is really a component of an intermediate product. Should "comprising" read –constructed from-?

Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 5,952,040. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 appears to be broader than claim 10. Please note that the patent's written description (col. 9, lines 22-55) and the patent's base claim 1 ("powder form having...material" (lines 4-7) define claim 10's nanostructured ceramic layer" in a manner commensurate with application claim 1's "quantum-confined" limitation.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(f) he did not himself invent the subject matter sought to be patented.

Claim 1 is rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. In particular, the Yadav et al (5,952,040) reference lists the name of Mark I. Yang as an inventor, while that same reference teaches the subject matter of claim 1.

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Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Yadav et al (5,952,040)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. In particular, the Yadav et al (5,952,040) reference lists the name of Mark I. Yang as an inventor, while that same reference teaches the subject matter of claim 1.

Claim 1 is directed to an invention not patentably distinct from claim 10 of commonly assigned 5,952,040. Specifically, although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 appears to be broader than claim 10. Please note that the patent's written description (col. 9, lines 22-55) and the patent's base claim 1 ("powder form having...material" (lines 4-7) define claim 10's nanostructured ceramic layer" in a manner commensurate with application claim 1's "quantum-confined" limitation.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned 5,952,040, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not

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commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 35 U.S.C. 103(c) and 37 CFR 1.78(c) to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 5,905,000. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 appears to be broader than claim 3. Please note that the patent's written description (col. 5, lines 45-65) define claim 3's "nanostructured" terminology in a manner commensurate with application claim 1's "quantum-confined" limitation.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(f) he did not himself invent the subject matter sought to be patented.

Claim 1 is rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. In particular, the Yadav et al (5,905,000) reference lists the

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name of Hongxing Hu as an inventor, while that same reference teaches the subject matter of claim 1.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Yadav et al (5,905,000)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. In particular, the Yadav et al (5,905,000) reference lists the name of Hongxing Hu as an inventor, while that same reference teaches the subject matter of claim 1.

Claim 1 is directed to an invention not patentably distinct from claim 3 of commonly assigned 5,905,000. Please note that the patent's written description (col. 5, lines 45-last) define claim 3's nanostructured" in a manner commensurate with application claim 1's "quantum-confined" limitation.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned 5,952,040, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the

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examiner to resolve this issue, the assignee is required under 35 U.S.C. 103(c) and 37 CFR 1.78(c) to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 16 of U.S. Patent No. 6,228,904. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 appears to be broader than claim 16. Please note that the patent's ABSTRACT ("nanostructured... sufficiently small to alter an ...property") and the patent's claim 16 ("filler comprising particles") define claim 16's "nanostructured" "composite material" in a manner commensurate with application claim 1's "quantum-confined" limitation.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(f) he did not himself invent the subject matter sought to be patented.

Claim 1 is rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. In particular, the Yadav et al (6,228,904) reference lists

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inventors not found in the instant application, while that same reference teaches the subject matter of claim 1.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Yadav et al (6,228,904)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. In particular, the Yadav et al (6,228,904) reference lists the names of additional inventors not found in the instant application, while that same reference teaches the subject matter of claim 1.

Claim 1 is directed to an invention not patentably distinct from claim 10 of commonly assigned 6,228,904. Specifically, although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 appears to be broader than claim 16. Please note that the patent's ABSTRACT ("nanostructured... sufficiently small to alter an ... property") and the patent's claim 16 ("filler comprising particles") define claim 16's "nanostructured" "composite material" in a manner commensurate with application claim 1's "quantum-confined" limitation.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP

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§ 2302). Commonly assigned 6,228,904, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 35 U.S.C. 103(c) and 37 CFR 1.78(c) to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raemis whose telephone number is 703-305-4919. The examiner can normally be reached on Monday to Friday from 6:30am to 4:00pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Robert R. Raemis
RAEMIS